

Photomask Japan 2015  
Oral Presentations

(as of February 23)

Date	Session time	Session No.	Session Title	Program No.	Presentation Title	Name	Affiliation
April 20	13:00-14:40	1	FPD Photomasks	1-1 (Invited)	Photomasks for FPD	Mr. Yasuhiro Kanaya	Japan Display Inc.
				1-2	Enabling the future registration requirements needed for effective production of the most advanced displays by using a combination of the Prexision-80 and the Prexision-MMS	Mr. Mikael Lars Wahlsten	Mycronic
				1-3	Latest technology trends of FPD Photomask	Mr. TORU KUZUWA	SK-Electronics CO., LTD.
				1-4	Impact of the back side flatness of a mask on the panel overlay	Mr. Daisuke Kemmochi	HOYA CORPORATION

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April 21	9:10-9:55	2	Keynote Lecture	2-1 (Invited)	Lithography and mask technology for sub10nm node; Photolithography vs EUVL.	Mr. Mark Phillips	Intel Corporation
	9:55-10:45	3	DSA	3-1 (Invited)	EMLC2014 Best Paper "Contact hole multiplication using grapho-epitaxy directed self-assembly:Process choices, template optimization,and placement accuracy"	Dr. Joost Bekaert	imec
				3-2	N7 logic Via patterning using templated DSA: Implementation aspects	Dr. Joost Bekaert	imec
	11:05-12:45	4	Writing Technologies	4-1 (Invited)	BACUS Best Paper "Mask data processing in the era of multibeam writers"	Mr. Frank E. Abboud	Intel Corporation
				4-2 (Invited)	Progress of Electron Multi-Beam Mask Writer	Dr. Platzgummer Elmar	IMS
				4-3	Correction of Resist Heating Effect on VSB Mask Writer	Ms. Mizuna Suganuma	NuFlare Technology
				4-4	Investigation of local registration performance of IMS Nanofabrication's Multi-Beam Mask Writer	Dr. Daniel Chalom	IMS Nanofabrication
	13:55-15:15	5	Photomask Fabrication Processes	5-1	The method of quartz damage recovery in the photomask repair process	Mr. Hoon Namkung	SK Hynix
				5-2	Demonstration of Parallel Scanning Probe Microscope for High Throughput Photomask Metrology	Dr. Hamed Sadeghian	TNO
				5-3	Multi-beam SEM technology for ultra-high throughput	Dr. Thomas Kemen	Carl Zeiss Microscopy GmbH
				5-4	Development of high-transmittance phase-shift mask fabrication for immersion ArF lithography	Mr. Won-Suk Ahn	SAMSUNG ELECTRONICS
	15:35-17:25	6	MDP&OPC	6-1 (Invited)	Modelbase MDP (tentative)	Mr. Patrick Schiavone	Aselta
				6-2	Model-based dose MPC for advanced VSB and multi-beam mask lithography	Mr. Peter Buck	Mentor Graphics Corporation
				6-3	Pitch-based pattern splitting for 1D layout	Mr. Ryo Nakayama	Canon Inc.
				6-4	High performance ILT for hotspots repair with hierarchical pattern matching	Mr. Kyohei Sakajiri	Mentor Graphics Corporation
				6-5	Challenges and requirements of mask data processing for multi-beam mask writer	Dr. Jin Choi	Samsung Electronics Co., Ltd

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April 22	9:00-10:40	8	EUVL Masks(1)	8-1 (Invited)	Summary from BACUS 2014 Panel Discussion	Mr. Naoya Hayashi	Dai Nippon Printing Co., Ltd.
				8-2 (Invited)	30 years of R&D of EUVL and its mask inspection technologies	Prof. Hiroo Kinoshita	University of Hyogo
				8-3	Phase Imaging Results of Phase Defect Using Micro Coherent EUV Scatterometry Microscope	Dr. Tetsuo Harada	University of Hyogo
				8-4	Mask blank defect printability comparison using optical mask/wafer inspection and bright field actinic mask inspection	Dr. Pawitter Mangat	GLOBALFOUNDRIES
	11:00-12:20	9	EUVL Masks(2)	9-1	EUV scanner printability evaluation of natural blank defects detected by actinic blank inspection	Mr. Noriaki Takagi	EIDEC
				9-2	ENDEAVOUR to Understand EUV Buried Defect Printability	Mr. Kazunori Seki	Toppan Photomasks, INC.
				9-3	Defectivity evaluation of EUV reticles with etched multilayer image border by wafer printing analysis	Mr. Rik Jonckheere	imec
				9-4	Alternative EUV mask technology to compensate for mask 3D effects	Dr. Lieve Van Look	imec, Kapeldreef 75, B-3001 Leuven, Belgium
	13:20-14:50	10	EUVL Masks(3)	10-1 (Invited)	Impact of mask 3D effect in EUV lithography	Dr. Jo Finders	ASML
				10-2	EUV pellicle development update	Dr. Carmen Zoldesi	ASML Netherlands
				10-3	Grid-supported EUV pellicles: a theoretical investigation for added value	Dr. Florian DHALLUIN	ASML
				10-4	Impact of the deformed extreme ultraviolet pellicle in terms of critical dimension uniformity.	Ms. In-Seon Kim	Hanyang University
	15:10-16:30	11	EUVL Masks(4)	11-1	Patterned mask inspection technology with Projection Electron Microscope (PEM) technique for 11 nm half-pitch (hp) generation EUV masks	Mr. Ryoichi Hirano	EUVL Infrastructure Development Center, Inc.
				11-2	Pattern inspection of etched multilayer EUV mask	Dr. Susumu Iida	EIDEC
				11-3	Analysis of a low-aspect phase defect for actinic EUVL mask blank inspection	Dr. Takeshi Yamane	EIDEC
				11-4	Detection capability of Actinic Blank Inspection tool	Mr. Tomohiro Suzuki	Lasertec corporation